

**TECHNOLOGY COORDINATION OFFICE**  
**Review and Opinion Regarding the Proposed Redundant Power and**  
**Cooling Systems at the Haley Road Data Center**  
**May 29, 2008**

---

**SPONSOR:** Clard Baker  
Manager - Operations  
Central Information Technology  
545.4402

**Cost Summary:**  
**FY 2008**

C.I.P  
\$ 310,008

**2008 Budget Impact**  
**Budgeted?**

**YES**

(Funding note: \$400,000 has been budgeted in FY08 for this project.)

**PROPOSED VENDOR:** Computer AC, Inc.

**OVERVIEW:**

The demolition of 157 Poplar will displace the County IT operations at that facility, prompting relocation to the County's data center at 6470 Haley Road. Remodeling at the Haley Road location is already underway. The existing cooling equipment is ill-suited to current equipment configurations and takes up significant floor space that can be much more effectively utilized. And the existing backup power has suffered multiple failures in the past. Both the UPS and cooling units have become difficult and expensive to maintain due to the scarcity of spare parts. The systems being requested will provide more cost-effective and reliable service.

**OPINION: RECOMMENDED**

**BUSINESS NEED**

The remodeling of the Haley Road data center has been prompted, in part, by the fact that the existing equipment will not fit in the current server room configuration. The remodel will reclaim wasted computer room space and enable consolidation of all equipment into a smaller area. The current cooling equipment, installed about ten years ago, is unsuited to high-density, rack-mounted computers and requires significant floor space for maintenance clearances. The new equipment has a much smaller footprint.

The current backup power environment has experienced failures in the past and required tedious manual recovery procedures. It was purchased 'used' and also installed about ten years ago. The proposed equipment will provide more reliable AC power with automated failover capability.

**VALUE FOR THE FINANCIAL OUTLAY**

Project implementation via a single vendor 'turnkey' contract for purchase and installation of both the cooling and UPS equipment, and which also includes some modifications to existing generators and electrical panels, arguably minimizes overall project costs. The purchase price of the UPS unit includes three years of maintenance costs. IT management estimates UPS and related Power Distribution Unit

maintenance cost reductions of over \$5,800 annually for the first three years and in excess of \$1,500 per year in subsequent years. Even bigger savings will accrue from the more energy efficient cooling units. Maintenance cost reductions related to the new cooling equipment exceed \$31,000 annually for the first three years and over \$28,000 annually in years four and five. TCO believes these cost reductions are credible and achievable.

## **DUE DILIGENCE**

All of the computer systems resident at the Haley Road data center will be supported by the existing power and cooling equipment during installation and configuration of the new units. Each system will undergo a carefully monitored shutdown and restart for migration to the new equipment. Central IT has committed to closely monitoring the new installation to ensure the work is performed as specified.

## **STRATEGIC FIT**

Reliable cooling and backup power is essential to assuring the availability of mission critical information systems and are in concert with industry practice for business continuity and disaster recovery management.

## **INFORMATION SECURITY CONSIDERATIONS**

No risks foreseen.

A handwritten signature in black ink, appearing to read 'Marc Johnson', is positioned above the printed name and title.

Marc Johnson  
for the Technology Coordination Office